

METHOD AND SYSTEM FOR PERFORMING ASYMMETRIC ADDRESS TRANSLATION

ABSTRACT

A method and system for performing network address translations for a session in a network is disclosed. The network includes at least one local network domain, and the at least one local network domain includes at least one computer system. Each computer system has a local address and is associated with a global address. The session exchanges packets that travel between the computer system within the local network domain and another computer system which may be outside of the local network domain. Each packet includes source and destination information. The method and system include determining a direction of travel for each packet, inbound or outbound, by searching a global address table for a match of a key for each packet. The key is provided using a portion of the destination information. The global address table includes at least one entry. Each entry corresponds to the global address for a first corresponding computer system. The method and system also include asymmetrically translating the source and destination information for each packet using an address translation table or session table based on whether or not the full match is found. The destination information is translated using information in the session table if the packet is inbound. The source information is translated based on the address translation table if the packet is outbound. The address translation table includes at least one entry. Each entry corresponds to the local address for a first corresponding computer system or a global host name for a shared host.